

# Exhibit 19

Advertisement

# Decoding Big Pharma's Secret Drug Pricing Practices

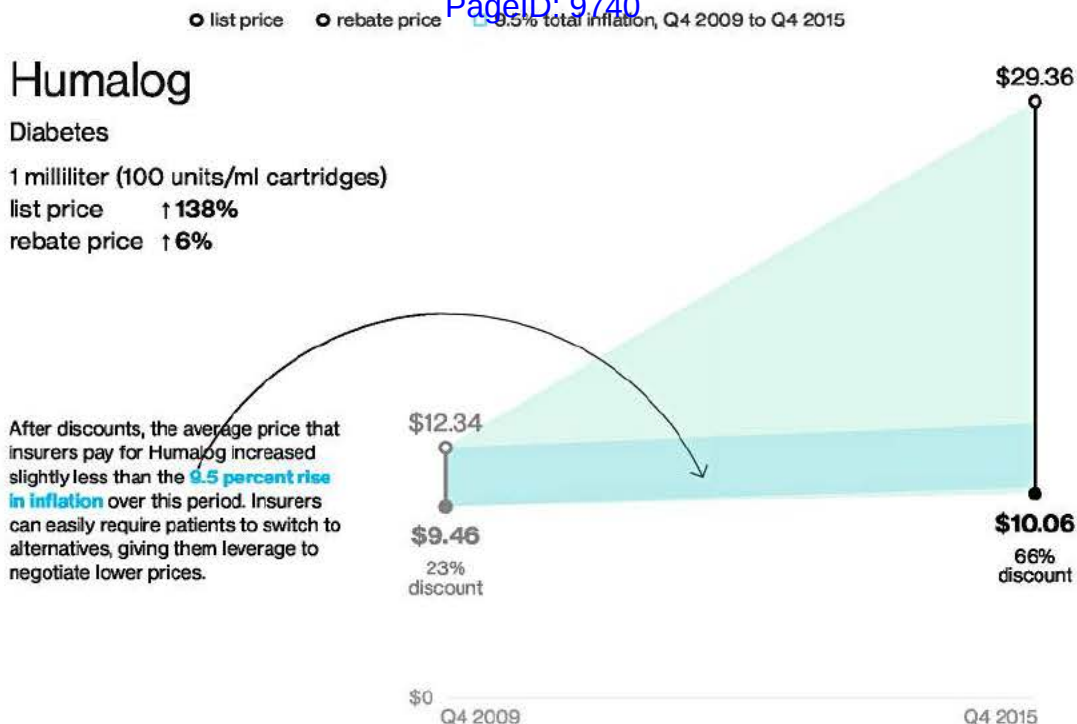
By Robert Langreth, Michael Keller and Christopher Cannon  
June 29, 2016

Health insurance companies buy prescription drugs the way U.S. consumers buy cars: There's the sticker price (which few people actually pay) and there's the negotiated price.

The pharmaceutical industry has long said that list prices aren't a reliable indicator of what Americans pay for prescription drugs because big customers, including health insurers and pharmacy benefit managers, negotiate discounts. But a Bloomberg analysis of 39 medicines with global sales of more than \$1 billion a year showed that 30 of them logged price increases of more than double the rate of inflation from 2009 to 2015, even after estimated discounts were factored in. Only six drugs had price increases in line with or below inflation.

The analysis is based on discount estimates from SSR Health, an investment research firm that compared estimates of gross sales for each drug, based on prescription data, to company-reported U.S. net sales. To approximate the negotiated prices, Bloomberg compared SSR Health's estimates for discounts with list prices for the drugs supplied by Connecture Inc., which provides price-comparison software to health plans. Many drug companies disputed the analysis, but none provided specific data to counter it.

Discounts vary dramatically, depending on disease type and how much competition exists. Take **Humalog**, the popular, short-acting insulin made by Eli Lilly & Co. Its big list price increases were wiped out by ever-bigger discounts.



Humalog faces competition from a very similar drug: Novolog, from Novo Nordisk A/S. Benefit managers have been playing one company against the other to get cheaper prices. Lilly offered discounts of 66 percent on Humalog last year, up from 23 percent in 2009, according to SSR Health estimates. Discounts for Novolog have risen in parallel fashion since 2012, the data show.

Lilly said it doesn't disclose rebates for individual drugs, but, on average, its discounts are 35 percent for commercial insurance plans and 80 percent for government plans. Novo Nordisk said U.S. discounts for all of its medicines were over 50 percent last year, compared with about 35 percent in 2010.

Most drugs don't look like Humalog. Take a look at **Humira** and **Enbrel**, the bestselling rheumatoid arthritis medications, from AbbVie Inc. and Amgen Inc., respectively.

● list price ● rebate price — 0.5% total inflation, Q4 2009 to Q4 2015

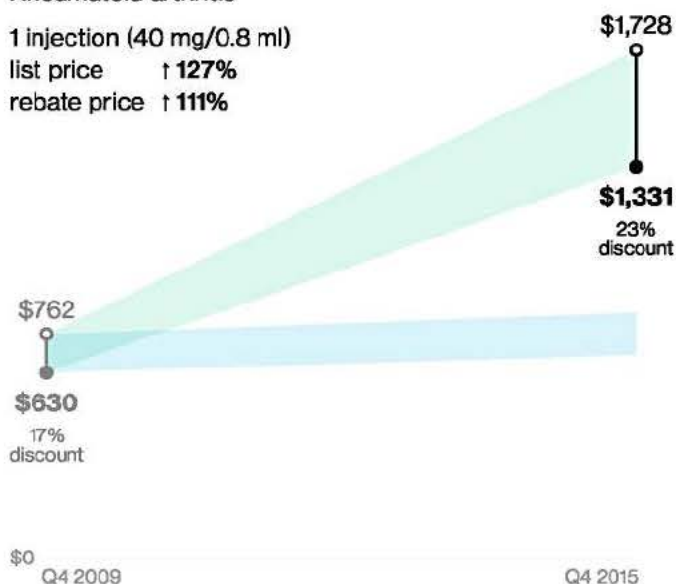
## Humira

Rheumatoid arthritis

1 injection (40 mg/0.8 ml)

list price ↑ 127%

rebate price ↑ 111%



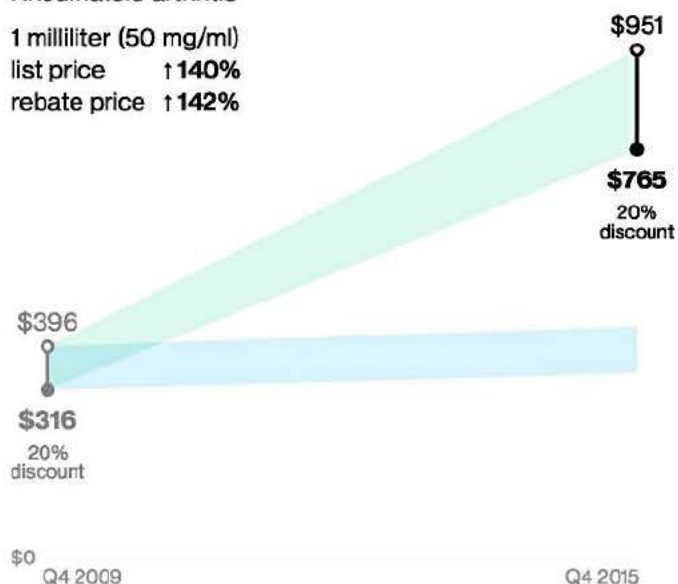
## Enbrel

Rheumatoid arthritis

1 milliliter (50 mg/ml)

list price ↑ 140%

rebate price ↑ 142%



Makers of these arthritis drugs have tremendous pricing power, said SSR Health analyst Richard Evans. That's in large part because doctors are reluctant to switch to cheaper drugs when their patients' symptoms are controlled via the popular therapies. This largely allows companies to keep the price increases, he said.

Amgen said its contracts with insurers prohibit it from discussing rebate levels, while AbbVie declined to comment on its rebates.

In some cases, drugmakers have been offering larger discounts, but not enough to keep up with list price gains. Pfizer increased the discount on its **Lyrca** drug for fibromyalgia to 33 percent last year, yet list prices have risen 145 percent in six years. The drug has relatively few close competitors, making it harder for insurers to remove from coverage lists.

○ list price    ● rebate price    ■ 9.5% total inflation, Q4 2009 to Q4 2015

## Lyrica

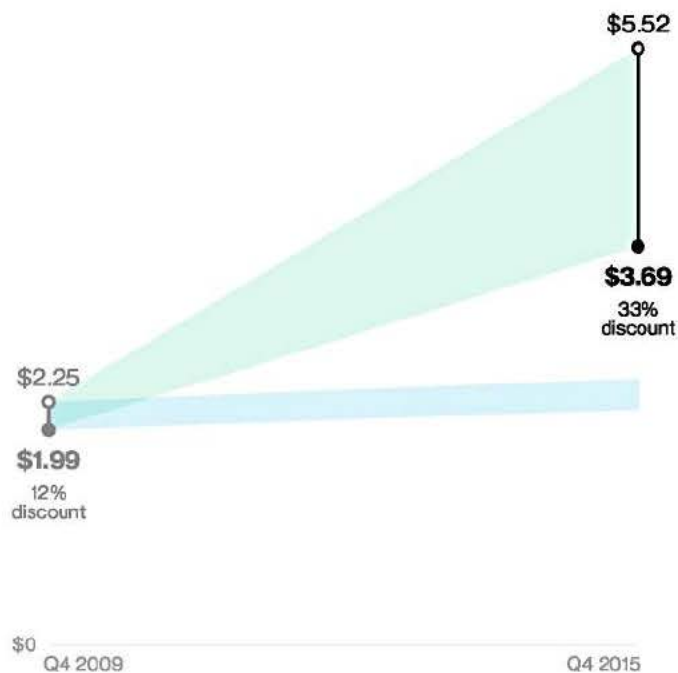
Fibromyalgia

1 tablet/capsule (150 mg)

list price    ↑ **145%**

rebate price ↑ **86%**

Pfizer's drug for nerve pain has seen increased discounts but even larger list price increases, resulting in a net increase of 86%. Lyrica has few close competitors.



Pfizer said that the calculations significantly underestimate its rebates and discounts without providing alternate numbers.

A small number of other drugs, including Biogen Inc.'s multiple sclerosis drug **Avonex**, have been able to push through big price hikes while simultaneously reducing discounts, according to the SSR Health data.

○ list price    ● rebate price    ■ 9.5% total inflation, Q4 2009 to Q4 2015

## Avonex

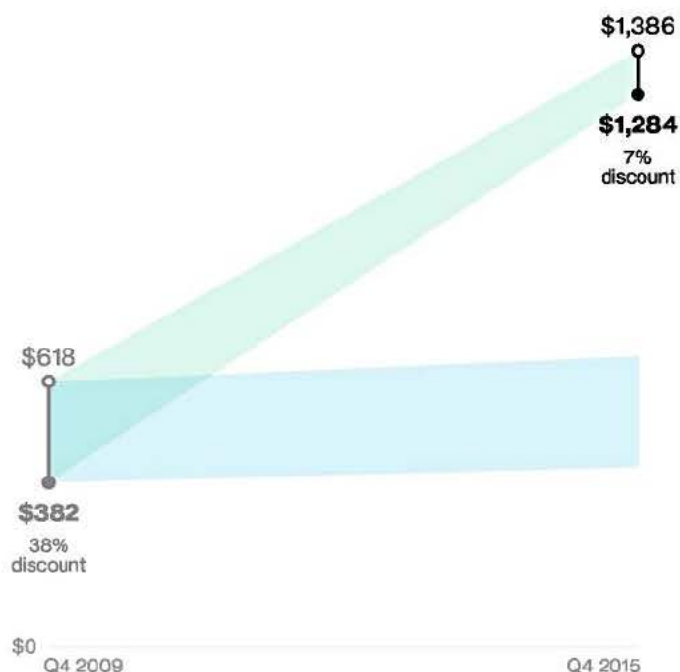
Multiple sclerosis

1 vial (30 mcg)

list price    ↑ **124%**

rebate price ↑ **236%**

A few drugs see shrinking discounts as demand declines or newer drugs become available. Patients still on Avonex, an older multiple sclerosis drug, are unlikely to switch, so they face steep increases.



Demand for Avonex has declined as Biogen focuses on its newer multiple sclerosis drugs. The remaining patients still on the drug are unlikely to switch to alternatives, said SSR Health's Evans. The estimated price, after discounts, has more than tripled in six years.

Biogen said Bloomberg's method "does not give proper estimates of discount levels." Actual rebate figures are proprietary, the company said.

None of the companies was prepared to confirm the data. And many other companies, including Johnson & Johnson, Roche Holding AG, GlaxoSmithKline Plc, Novartis AG and Bristol-Myers Squibb Co., also disputed the analysis, saying it underestimated rebates, failed to capture certain sales channels, overestimated net price increases, or was otherwise not accurate. None provided alternative numbers.

The study also encompassed drugs from Astellas Pharma Inc., AstraZeneca Plc, Daiichi Sankyo Co., Gilead Sciences Inc., Merck & Co., and Mallinckrodt Plc. Those companies either declined to comment on rebates or said their discounts were confidential. Sanofi said that it has increased rebate amounts in recent years in order to maintain favorable coverage. Daiichi Sankyo said that Bloomberg's general approach was inaccurate. Gilead Sciences said its HIV drug price increases would not apply to U.S. HIV patients, who get drugs through certain government programs.

Two industry trade groups, the Pharmaceutical Research and Manufacturers of America (PhRMA), and the Biotechnology Innovation Organization (BIO), pointed to IMS Health Holdings data showing that discounted prices didn't rise as much last year as in previous years. They said that "cherry picking" specific drugs fails to show how the market really works and to take into account the competition from generics.

Growth in prescription drug prices has been in line with other health-care prices, PhRMA said. "Private negotiations between manufacturers and payers drive our competitive marketplace," the group said.

Among the drugs in the analysis, 27 had discounted prices that rose at rates of 25 percent or more in six years, well above the consumer price index, which rose 9.5 percent during this period. Besides Humira and Enbrel, prices at least doubled for seven drugs, including Merck & Co.'s cholesterol drug Vytorin and Pfizer Inc.'s impotence pill Viagra. Overall, discounts on the 39 drugs rose from 20 percent on average in 2009 to almost 37 percent in 2015.

#### Price increases after discounts, Q4 2009 to Q4 2015

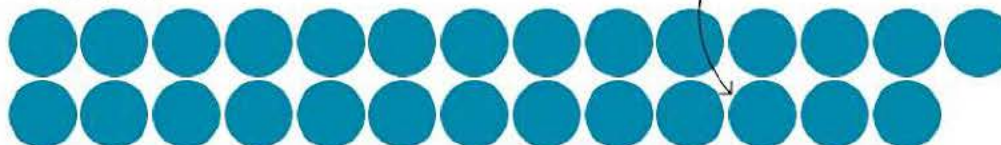
Below or in line with inflation



Slightly above inflation



Well above inflation



Bloomberg also looked at pricing for dozens of other drugs. For many of them, rebate data was only available back to 2012, so they were not included in the analysis. These drugs showed similar pricing patterns, with most gaining significantly faster than inflation and a much smaller number failing to keep up with it.

Discounts varied sharply by disease. The rebates averaged just under 20 percent in 2015 for cancer treatments, a class of pricey drugs for which insurers are reluctant to limit coverage. But rebates for many classes of diabetes drugs, which face lots of competition and insurer restrictions, averaged over 50 percent in 2015, SSR Health found.

List price increases “are accelerating across the board,” said Jim Yocum, senior vice president for Connecture. His analysis found that brand drug list prices, on average, rose 11.5 percent a year since 2012. “Rebates can't keep up.”

### Drug pricing models

Sort these top-selling drugs by pricing, or search by name and treatment type. Prices are for the amount listed.

Condition: All

Sort: Discounted price change

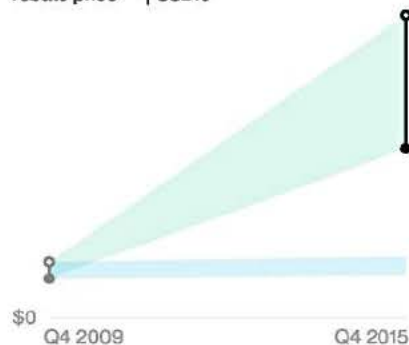
**Humulin R U-500**

Diabetes

1 milliliter (Concentrated)

list price ↑ 442%

rebate price ↑ 332%

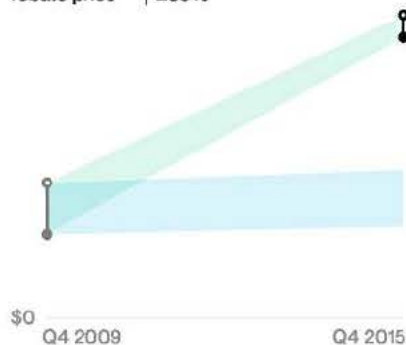
**Avonex**

Multiple sclerosis

1 vial (30 mcg)

list price ↑ 124%

rebate price ↑ 236%

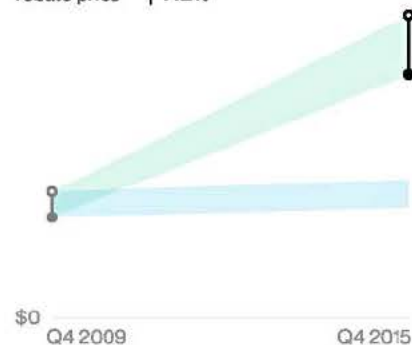
**Enbrel**

Rheumatoid arthritis

1 milliliter (50 mg/ml)

list price ↑ 140%

rebate price ↑ 142%

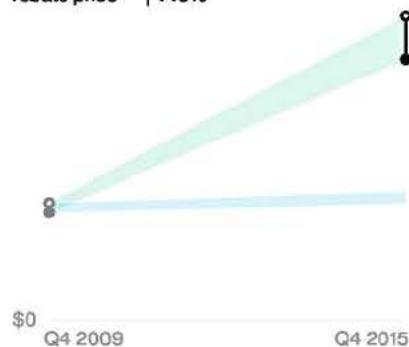
**Premarin**

Menopausal symptoms

1 tablet/capsule (0.3 mg)

list price ↑ 158%

rebate price ↑ 140%

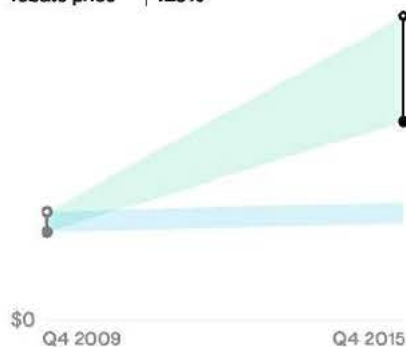
**Cialis**

Erectile dysfunction

1 tablet/capsule (10 mg)

list price ↑ 180%

rebate price ↑ 123%

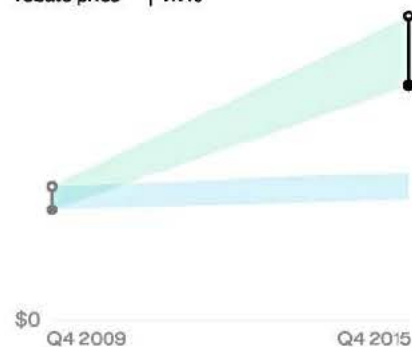
**Humira**

Rheumatoid arthritis

1 injection (40 mg/0.8 ml)

list price ↑ 127%

rebate price ↑ 111%

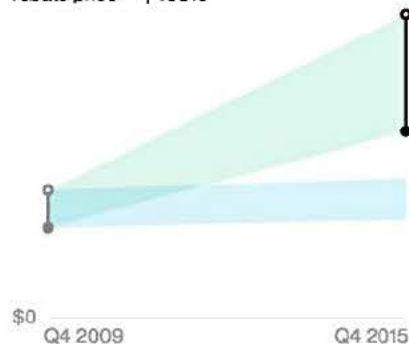
**Vytorin**

High cholesterol

1 tablet/capsule (10-40 mg)

list price ↑ 139%

rebate price ↑ 108%

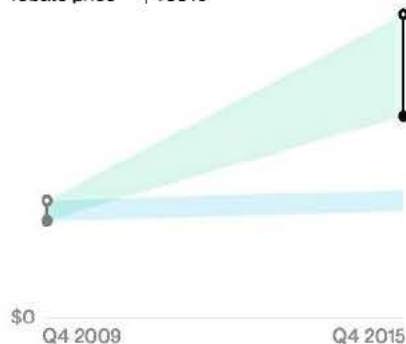
**Viagra**

Erectile dysfunction

1 tablet/capsule (50 mg)

list price ↑ 160%

rebate price ↑ 106%

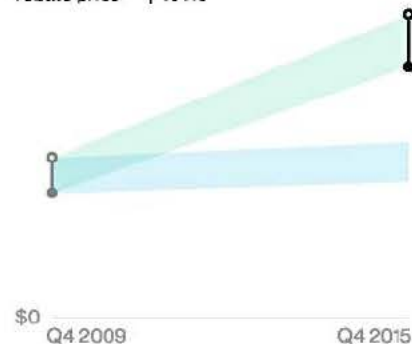
**Tarceva**

Cancer

1 tablet/capsule (150 mg)

list price ↑ 89%

rebate price ↑ 101%



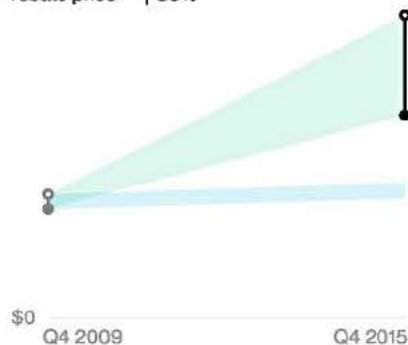
**Lyrice**

Fibromyalgia

1 tablet/capsule (150 mg)

list price ↑ 145%

rebate price ↑ 86%

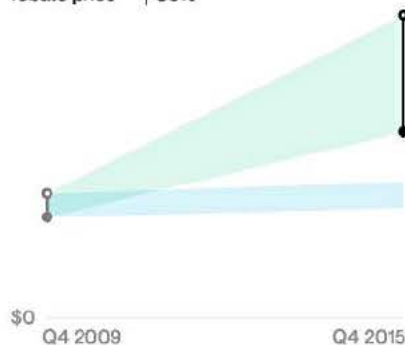
**Zetia**

High cholesterol

1 tablet/capsule (10 mg)

list price ↑ 144%

rebate price ↑ 85%

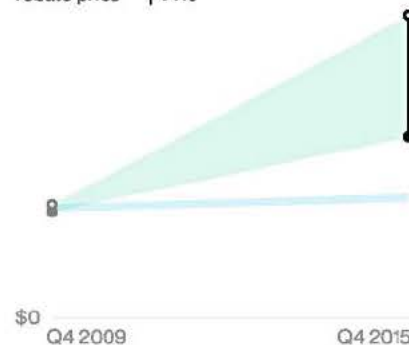
**Forteo**

Osteoporosis

1 milliliter (600/2.4 ml)

list price ↑ 167%

rebate price ↑ 71%

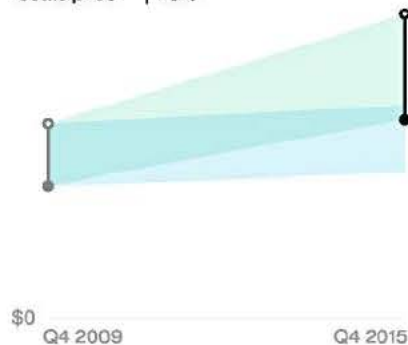
**Neulasta**

Low white blood cell

1 milliliter (6 mg/0.6 ml)

list price ↑ 57%

rebate price ↑ 49%

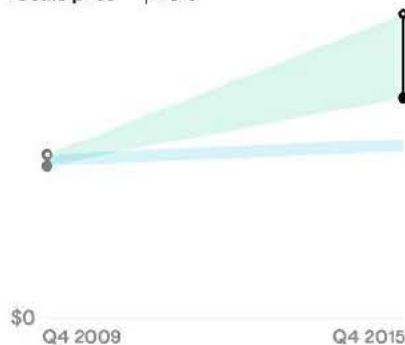
**Sensipar**

Hyperparathyroidism

1 tablet/capsule (30 mg)

list price ↑ 87%

rebate price ↑ 45%

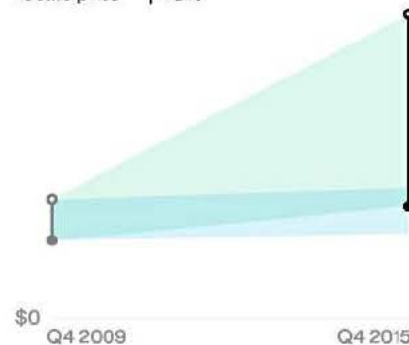
**Benicar**

High blood pressure

1 tablet/capsule (20 mg)

list price ↑ 154%

rebate price ↑ 43%

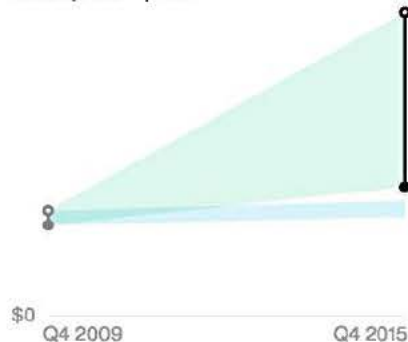
**Lantus**

Diabetes

1 milliliter (100 units/ml)

list price ↑ 189%

rebate price ↑ 42%

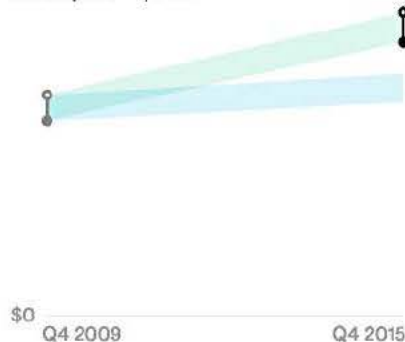
**Neupogen**

Low white blood cell

1 milliliter (480 mcg)

list price ↑ 37%

rebate price ↑ 40%

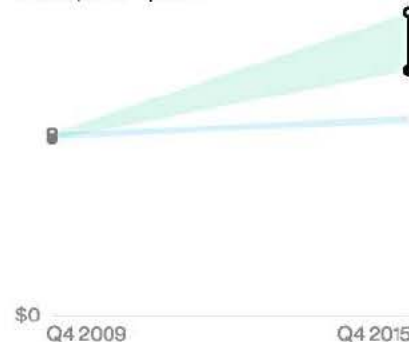
**Orencia**

Rheumatoid arthritis

1 vial (250 mg)

list price ↑ 66%

rebate price ↑ 39%



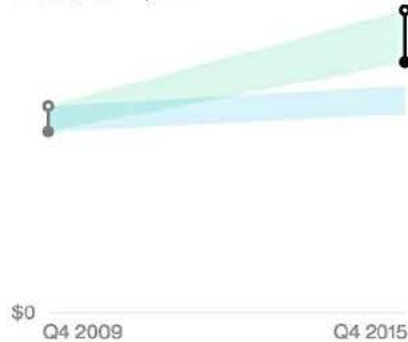
### H.P. Acthar

Autoimmune diseases

1 milliliter (80 units/ml)

list price ↑ 46%

rebate price ↑ 38%



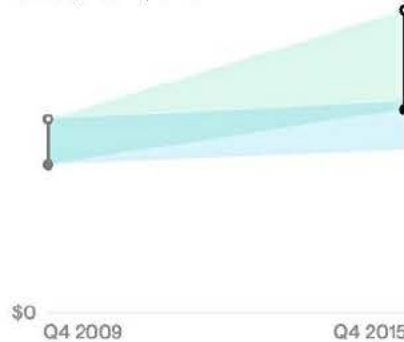
### Viread

HIV

1 tablet/capsule (300 mg)

list price ↑ 57%

rebate price ↑ 37%



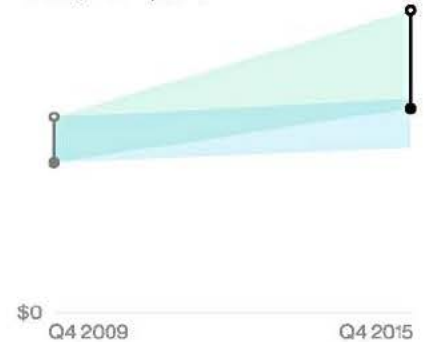
### Atripla

HIV

1 tablet/capsule

list price ↑ 55%

rebate price ↑ 36%



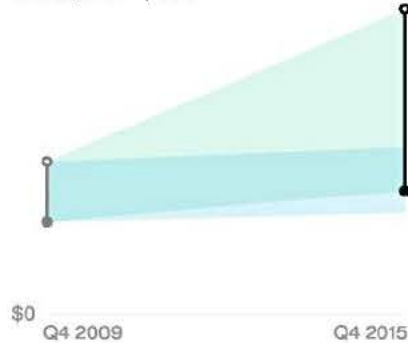
### Crestor

High cholesterol

1 tablet/capsule (10 mg)

list price ↑ 101%

rebate price ↑ 34%



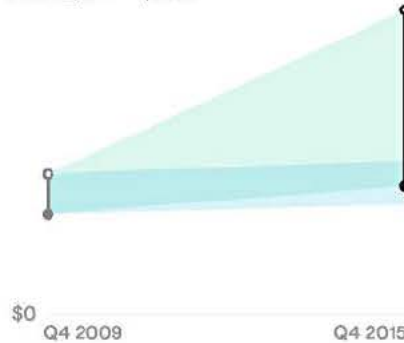
### Vesicare

Overactive bladder

1 tablet/capsule (5 mg)

list price ↑ 118%

rebate price ↑ 29%



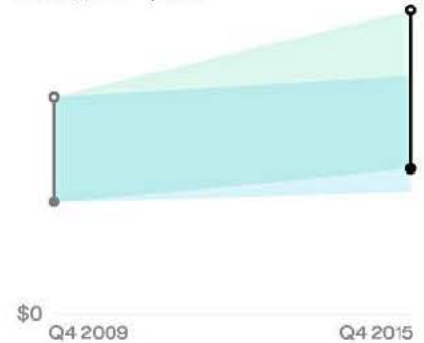
### Aranesp

Anemia

1 milliliter (500 mcg syringe)

list price ↑ 40%

rebate price ↑ 29%



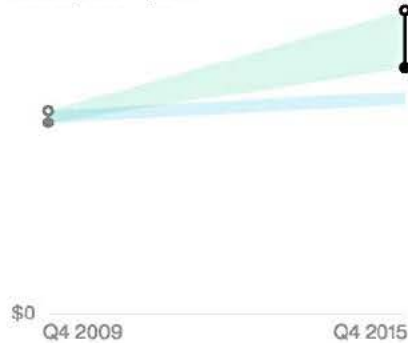
### Sandostatin LAR Depot

Acromegaly

1 kit (20 mg)

list price ↑ 49%

rebate price ↑ 29%



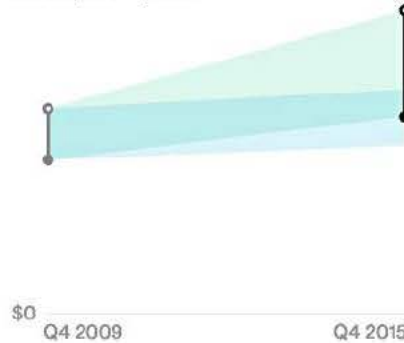
### Reyataz

HIV

1 tablet/capsule (300 mg)

list price ↑ 48%

rebate price ↑ 28%



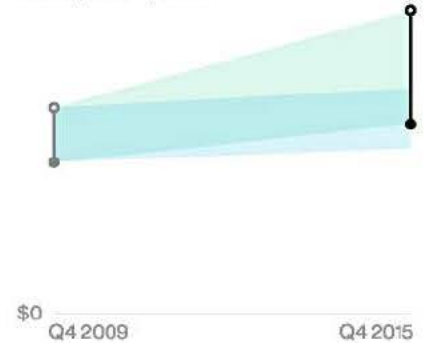
### Truvada

HIV

1 tablet/capsule

list price ↑ 47%

rebate price ↑ 25%



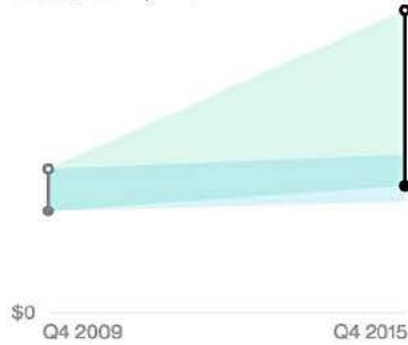
### Seroquel XR

Schizophrenia

1 tablet/capsule (400 mg)

list price ↑ 110%

rebate price ↑ 24%



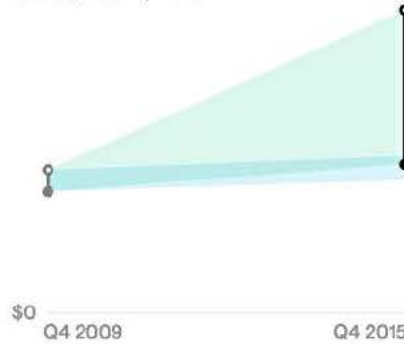
### Januvia

Diabetes

1 tablet/capsule (100 mg)

list price ↑ 112%

rebate price ↑ 23%



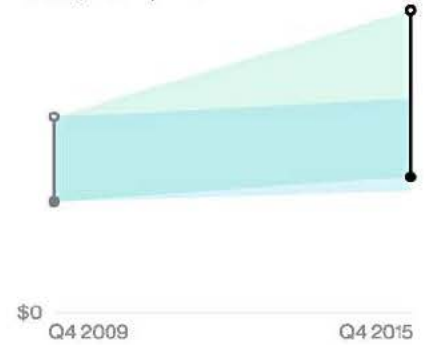
### Procrit

Anemia

1 milliliter (10000/ml)

list price ↑ 55%

rebate price ↑ 22%



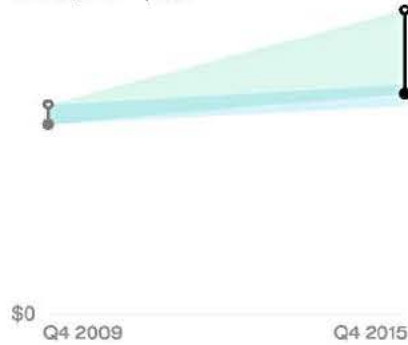
### Prezista

HIV

1 tablet/capsule (600 mg)

list price ↑ 45%

rebate price ↑ 16%



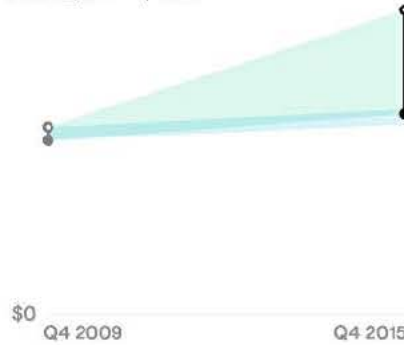
### Remicade

Rheumatoid arthritis

1 vial (100 mg)

list price ↑ 63%

rebate price ↑ 15%



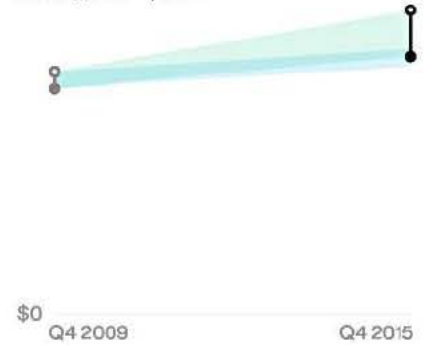
### Alimta

Cancer

1 vial (500 mg vial)

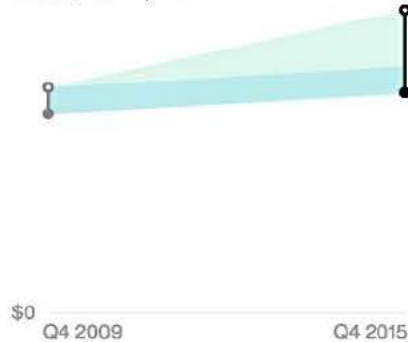
list price ↑ 28%

rebate price ↑ 14%



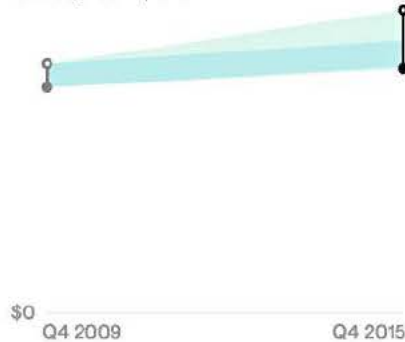
### Isentress

HIV  
1 tablet/capsule (400 mg)  
list price ↑ 34%  
rebate price ↑ 11%



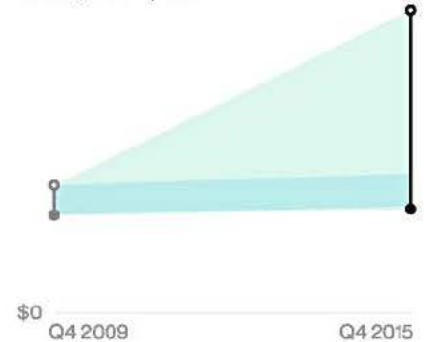
### Epogen

Anemia  
1 milliliter (10,000 units/ml)  
list price ↑ 22%  
rebate price ↑ 8%



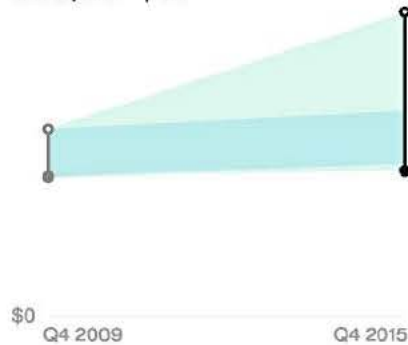
### Humalog

Diabetes  
1 milliliter (100 units/ml cartridges)  
list price ↑ 138%  
rebate price ↑ 6%



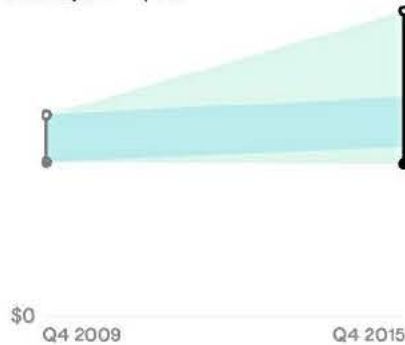
### Advair Diskus

Asthma  
1 inhalation (250mcg/50mcg)  
list price ↑ 63%  
rebate price ↑ 4%



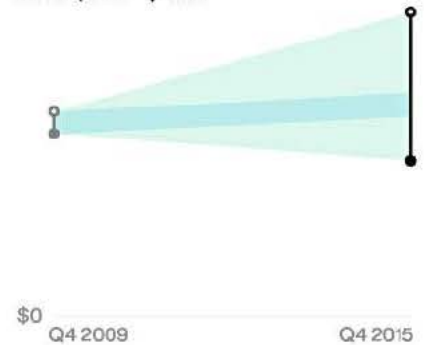
### Symbicort

Asthma  
1 gram (80-4.5 mcg)  
list price ↑ 52%  
rebate price ↓ -1%



### Pulmicort

Asthma  
1 device (180 mcg)  
list price ↑ 49%  
rebate price ↓ -15%



## Methodology

Connecture surveyed U.S. list prices from the fourth quarter of 2009 to the fourth quarter of 2015 for drugs with \$1 billion or more in 2015 worldwide sales, according to Bloomberg data. U.S. prices are for the doses shown; in some cases, price increases are less for other dosages. U.S. drug rebates were calculated by SSR Health based on calendar year periods by comparing gross sales estimates for each drug, based on prescription data, to company-reported net sales. Net prices were calculated by applying estimated rebates for a calendar year to fourth quarter list prices. SSR Health was not able to calculate rebates for some specialty drugs. In some cases where data was unavailable, rebates were estimated based on three quarters of data in a year. Drugs with direct generic competition for all forms of the drug before 2016 are not included. Percentage price increases in charts may not exactly match dollar figures due to rounding of prices and rebates. General inflation figure is the consumer price index change from December 2009 to December 2015.

**Watch Next: The High Cost of Prescription Medicine**